

Notice of Allowability

Application No.

10/698,767

Examiner

Don Williams

Applicant(s)

CHENG ET AL.

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 14 June 2006.
2. ☒ The allowed claim(s) is/are 1-3,5-7,11-13,15-17,19,24-26 and 29-32.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

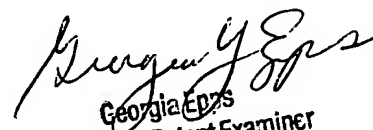
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Georgia Enns
Supervisory Patent Examiner
Technology Center 2800

DETAILED ACTION

Allowable Subject Matter

Claims 1-3, 5-7, 11-13, 15-17, 19, 24-26, and 29-32 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art fails to teach either singly or in combination a method of determining a height of a highest point on a wire loop comprising the steps of positioning a height gauge device over the location of the approximated highest point on the wire loop, projecting incident light from the height gauge device for illuminating the approximated highest point, receiving with the height gauge device reflected light produced from the incident light, and determining from a characteristic of the reflected light the height of the highest point relative to a reference surface regarding claim (1) and claim (15); and moving the height gauge device relative to the wire loop along a scanning path such that incident light projected from the height gauge device intersects a length of each of a plurality of wire loops at a plurality of positions regarding claim (11) and claim (24)

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

With respect to the relevant references of Sugawara (5,347,362), Sumi et al (4,942,618), and Tomiyama et al (5,576,828) a method and an apparatus for inspecting wires by bringing the focus of an optical assembly into a desired point of a bonded wire to obtain the height of a desired point of the wire is taught. However, Sugawara, Sumi et al, and Tomiyama et al fail to disclose a method and an apparatus that position a height gauge device over the location of the highest point on the wire loop, project incident light from the height gauge device for illuminating the highest point, and determine from a characteristic of the reflected light the height of the highest point relative to a reference surface. The relevant references also fail to provide a positioning device configured to move the height gauge device relative to the wire loops along a scanning path where the incident light projected from the height gauge intersects a length of each wire loop at a plurality of positions. Therefore, because of the reasoning set forth above, the allowance is proper.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Don Williams whose telephone number is 571-272-8538. The examiner can normally be reached on 8:30a.m. to 5:30a.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


George Epps
Supervisory Patent Examiner
Technology Center 2800